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EXAMINER	
CHOWDHURY, NIGAR	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/520,548	ITOH, MASANORI	
	Examiner	Art Unit	
	NIGAR CHOWDHURY	2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 June 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-9 and 12-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-9 and 12-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 January 2005* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 06/01/2010 have been fully considered but they are not persuasive.

2. In re pages 10-11, applicant argues that Sawabe discloses the generation of identification information that indicates the type of recording information (i.e., video file or audio file) on a given recording medium but fails to disclose the same attribute information disclosed in the present application (e.g., data size, playback time, address of the data storage location, time stamp representing playback timing, encoded bit rate, information about codec).

In response, the examiner respectfully disagrees. The Specification is not the measure of invention. Therefore, limitations contained therein can not be read into the claims for the purpose of avoiding the prior art. In re Sporck, 55 CCPA 743, 386 F.2d 924, 155 USPQ 687 (1968).

Furthermore, Sawabe et al. discloses from col. 11 lines 41-46 that "..audio and video recording standards have common structures….exception of the fact that an attribute of information to be recorded in audio information and video information…", col. 28 lines 11-col. 29 lines 61 that "....the reproduction list ...is composed of: a disk identification information pointer....identification information....describes an attribute of the second setting reproduction sequence information….which indicates whether or not the reproduction list corresponds to the audio information or to the video information…..". Therefore, Sawabe et al. discloses the attribute information by the

indication whether or not the reproduction list corresponds to the audio information or to the video information.

3. Applicant's arguments with respect to claims 1-9, 11-17 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

> Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.
>
> When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare In re Lowry, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).
>
> In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

4. Claim(s) 14, 16 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 14, 16 defines a computer program embodying functional descriptive material. However, the claim does not define a computer-readable medium or memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). That is, the scope of the presently claimed a computer program can range from paper on which the program is written, to a program simply contemplated and memorized by a person. Any amendment to the claim should be commensurate with its corresponding disclosure.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-8, 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,251,413 by Dow et al. in view of US 6,898,160 by Sawabe et al. and US 7,272,299 by Notoya et al.

2. Regarding **claim 1**, Dow et al. discloses a data processor comprising:

- a receiving section for receiving video data and audio data (fig. 1 (102), col. 5 lines 32-49);
- a compressing section for generating encoded data, complying with the MPEG-2 system standard, by encoding the video data and the audio data received (fig. 1 (102), col. 5 lines 32-60);
- an auxiliary information generating section for generating auxiliary information, which includes reference information to make reference to the encoded data (fig. 1, col. 5 lines 32-60, col. 17 lines 11-65);
- a writing section for writing the encoded data and the auxiliary information on a storage medium as a data file complying with the MPEG-2 system standard and an auxiliary information file, respectively, wherein the encoded data is decodable by the MPEG-2 system standard (fig. 1, col. 5 lines 50-col. 6 lines 3).

Dow et al. fails to disclose attribute information that uses a video object unit (VOBU) of the encoded data as a sample unit and that describes an attribute of the sample unit and encoded data is decodable by the auxiliary information file in accordance with a standard other than the MPEG-2 system standard.

Sawabe et al. discloses attribute information that uses a video object unit (VOBU) of the encoded data as a sample unit and that describes an attribute of the sample unit (col. 11 lines 41-46, col. 28 lines 11-col. 29 lines 61).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Dow et al.'s system to

include attribute information, as taught by Sawabe et al., to provide additional information about an audio and video to the viewer which will make easier for a viewer during watching.

Dow et al., and Sawabe et al. both fails to disclose encoded data is decodable by the auxiliary information file in accordance with a standard other than the MPEG-2 system standard.

Notoya et al. disclose encoded data is decodable by the auxiliary information file in accordance with a standard other than the MPEG-2 system standard (col. 6 lines 10-19, 32-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Dow et al. and Sawabe et al.'s system to include another system to decode, as taught by Sawabe et al., other than MPEG-2, to provide more flexibility to a user to use different system to decode encoded data.

3. Regarding **claim 2**, Dow et al. discloses the data processor wherein the reference information represents the file name and storage location of the data file stored on the storage medium (fig. 1, 4, col. 7 lines 31-63, col. 11 lines 24-41).

4. Regarding **claim 3**, Sawabe et al. discloses the data processor wherein the compressing section generates the encoded data as a plurality of sets, and wherein the

auxiliary information generating section generates the reference information that makes reference to each set of encoded data (fig. 1, col. 12 lines 52-col. 13 lines 25).

5. Regarding **claim 4**, Sawabe et al. the data processor wherein the compressing section generates the encoded data as a plurality of sets (fig. 1, paragraph 0010, 0013, 0040, 0043, 0046), and wherein the auxiliary information generating section generates stream data as a single stream by arranging the plurality of sets of encoded data as a series (paragraph 0051, 0058, 0084-0085, 0113), and also generates auxiliary information that further describes location information specifying the storage location of the encoded data if the data size of the encoded data is not constant every time the data is read (fig. 1, col. 12 lines 52-col. 13 lines 25).

6. Regarding **claim 5**, Dow et al. disclose the data processor wherein the compressing section generates the encoded data as either an MPEG-2 program stream or an MPEG-2 transport stream ((fig. 1 (102), col. 5 lines 32-60)).

7. Regarding **claim 6**, Sawabe et al. discloses the data processor wherein the auxiliary information generating section describes an audio frame of encoded audio data, representing the audio data of the encoded data, as another sample unit in the attribute information (fig. 6, col. 20 lines 54-col. 21 lines 22).

8. Regarding **claim 7**, Sawabe et al. discloses the data processor wherein the compressing section generates first, second and third data files, the second data file including frame data that is needed to decode the encoded data of the first and third data files continuously with no time gap left (fig. 2, col. 15 lines 1-col. 16 lines 9).

9. **Claim 8** is rejected for the same reason as discussed in the corresponding claim 1 above

10. Regarding **claim 12**, Dow et al. discloses a data processor for processing stream data, the stream data comprising:

- encoded data included in a data file complying with the MPEG-2 system standard; and auxiliary information included in an auxiliary information file (fig. 1 (102), col. 5 lines 32-49),
- wherein the encoded data is obtained by encoding video data and audio data in accordance with the MPEG-2 system standard, and is decodable the MPEG-2 system standard (fig. 1 (102), col. 5 lines 32-60), and
- wherein the auxiliary information includes: reference information to make reference to the encoded data; (fig. 1, col. 5 lines 32-60, col. 17 lines 11-65),

Dow et al. fails to disclose attribute information that uses a video object unit (VOBU) of the encoded data as a sample unit and that describes an attribute of the sample unit and

- the data processor comprising:
- a reading section for reading the auxiliary information file from the stream data and also reading the data file in response to a control signal;
- a reading control section for generating, as the control signal, a signal instructing that the data file be read in accordance with the reference information defined by the auxiliary information of the auxiliary information file;
- a decoding section, which receives the encoded data from the data file read and the auxiliary information and which decodes the encoded data into the video data and the audio data in accordance with the attribute information included in the auxiliary information;
- an output section for outputting the video and audio data decoded.

And encoded data is decodable by the auxiliary information file in accordance with a standard other than the MPEG-2 system standard.

Sawabe et al. disclose attribute information that uses a video object unit (VOBU) of the encoded data as a sample unit and that describes an attribute of the sample unit (col. 11 lines 41-46, col. 28 lines 11-col. 29 lines 61) and

- the data processor comprising:
- a reading section for reading the auxiliary information file from the stream data and also reading the data file in response to a control signal (fig. 10, col. 32 lines 64-col. 33 lines 49);

- a reading control section for generating, as the control signal, a signal instructing that the data file be read in accordance with the reference information defined by the auxiliary information of the auxiliary information file (fig. 10, col. 32 lines 64-col. 33 lines 49);
- a decoding section, which receives the encoded data from the data file read and the auxiliary information and which decodes the encoded data into the video data and the audio data in accordance with the attribute information included in the auxiliary information (fig. 10, col. 32 lines 64-col. 33 lines 49);
- an output section for outputting the video and audio data decoded (fig. 10, col. 32 lines 64-col. 33 lines 49).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Dow et al.'s system to include attribute information and data processor, as taught by Sawabe et al., to process additional information about an audio and video to the viewer which will make easier for a viewer to watching.

Dow et al., and Sawabe et al. both fails to disclose encoded data is decodable by the auxiliary information file in accordance with a standard other than the MPEG-2 system standard.

Notoya et al. disclose encoded data is decodable by the auxiliary information file in accordance with a standard other than the MPEG-2 system standard (col. 6 lines 10-19, 32-44).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify the proposed combination of Dow et al. and Sawabe et al.'s system to include another system to decode, as taught by Sawabe et al., other than MPEG-2, to provide more flexibility to a user to use different system to decode encoded data.

11. **Claims 13-14** are rejected for the same reason as discussed in the corresponding claim 1 above

12. **Claims 15-16** are rejected for the same reason as discussed in the corresponding claim 12 above

13. **Claim 17** is rejected for the same reason as discussed in the corresponding claim 1 above

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 7,251,413 by Dow et al., US 6,898,160 by Sawabe et al. and US 7,272,299 by Notoya et al.

15. Regarding **claim 9**, Dow et al. discloses the data processor wherein the auxiliary information generating section generates an auxiliary information file, Sawabe et al. discloses attribute information that uses a video object unit (VOBU) of the encoded data as a sample unit and that describes an attribute of the sample unit (col. 11 lines 41-46, col. 28 lines 11-col. 29 lines 61) but fails to disclose auxiliary information file that is described in the QuickTime format.

It is noted that the use of QuickTime format is old and well-known in the recording art. Therefore, official notice is taken. Moreover, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have a well-known QuickTime format which maintain tracks in a hierarchal data structure consisting of objects called atoms. An atom can be a parent to other atoms or it can contain media or edit data, but it cannot do both. QuickTime format is particularly suited for editing, as it is capable of importing and editing in place (without data copying)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NIGAR CHOWDHURY whose telephone number is (571)272-8890. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thai Tran can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NC
08/26/2010

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621